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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION N		
10/001,887	11/20/2001	Susana Salceda	DEX-0269	3405	
26259	7590 09/22/2003				
LICATLA & TYRRELL P.C.			EXAMINER		
66 E. MAIN S MARLTON, I			HORLICK, KENNETH R		
			ART UNIT	PAPER NUMBER	
			1637		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.		Applicant(s)				
		10/001,887		SALCEDA ET AL.				
		Examiner		Art Unit				
	•	Kenneth R Horlic	k	1637				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SH	ORTENED STATUTORY PERIOD FOR REPL	Y IS SET TO EXF	PIRE <u>1</u> MONTH(S) FROM				
- External e	MAILING DATE OF THIS COMMUNICATION, nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period or the to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	y within the statutory mini will apply and will expire S , cause the application to	mum of thirty (30) days SIX (6) MONTHS from to become ABANDONED	will be considered timely. he mailing date of this communication. 0 (35 U.S.C. § 133).	·			
Status								
1)	Responsive to communication(s) filed on							
2a)□		is action is non-fi						
3) Dispositi	Since this application is in condition for allows closed in accordance with the practice under ion of Claims				3			
	Claim(s) 1-17 is/are pending in the application).						
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
6)[6) Claim(s) is/are rejected.							
7)	Claim(s) is/are objected to.							
8)⊠ Claim(s) <u>1-17</u> are subject to restriction and/or election requirement.								
Applicati	on Papers							
9)[The specification is objected to by the Examine	r.						
10)[The drawing(s) filed on iş/are: a)∏ acce		•					
	Applicant may not request that any objection to the	-,,	•	• • •				
11)[The proposed drawing correction filed on	• • • •		ved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.								
,	The oath or declaration is objected to by the Ex	aminer.						
	ander 35 U.S.C. §§ 119 and 120			(1) (5)				
•	Acknowledgment is made of a claim for foreign	n priority under 35	0.S.C. § 119(a))-(d) or (t).				
a) _l	☐ All b)☐ Some * c)☐ None of:							
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 							
* 5	 Copies of the certified copies of the prior application from the International Bu See the attached detailed Office action for a list 	reau (PCT Rule 1	7.2(a)).	_				
14)[] <i>A</i>	Acknowledgment is made of a claim for domesti	c priority under 35	5 U.S.C. § 119(e) (to a provisional application	on).			
)							
Attachmen		· · · · · · · · · · · · · · · · · · ·	00					
2) Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) 🔲		(PTO-413) Paper No(s) atent Application (PTO-152)				

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Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, 7-9, and 15 (partial) drawn to nucleic acids, vectors, host cells and methods of making a polypeptide, classified in class 536, subclass 23.1 and class 435, subclasses 69.1, 320.1 and 325, for example.
 - II. Claims 10-11, drawn to polypeptides, classified in class 530, subclass 350, for example.
 - III. Claims 12 and 15 (partial), drawn to an antibody, classified in class 530, subclass 387.1, for example.
 - IV. Claims 6 and 14 (partial), drawn to a method of determining the presence of a nucleic acid, classified in class 435, subclass 6.
 - V. Claims 13 and 14 (partial), drawn to a method of determining the presence of a polypeptide, classified in class 435, subclass 7.1, for example.
 - VI. Claim 16, drawn to a method of treating a patient with lung cancer by administering an antibody, classified in class 514, subclass 2, for example.
 - VII. Claim 17 (partial), drawn to a vaccine comprising a polypeptide, classified in class 514, subclass 2.
 - VIII. Claim 17 (partial), drawn to a vaccine comprising a nucleic acid, classified in class 514, subclass 44.

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2. The claims of Group I-VIII are drawn to a multitude of nucleic acids (SEQ ID NO: 1-81), polypeptides (SEQ ID NO:82-137), antibodies thereto and methods/kits which use these compounds. Each of the different nucleic acids, polypeptides, antibodies and methods of use are independent and distinct because no common structural or functional properties are shared. Accordingly, these claims are subject to restriction under 35 U.S.C. § 121.

Upon election of one of Groups I-VIII, Applicant is additionally required to elect a **single** nucleic acid, polypeptide, or antibody. This requirement is not to be construed as a requirement for an election of species, since each of the compounds is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

- 3. The inventions are distinct, each from the other because of the following reasons:
- A) The inventions of Groups I, II, III, VII, and VIII are patentably distinct because they are drawn to different products having different structures and functions. The nucleic acid of Group I is composed of nucleotides linked in phospodiester bonds and arranged in space as a double helix. The polypeptide of Group II is composed of amino acids linked in peptide bonds and arranged spatially in a number of different tertiary structures including alpha helices, betapleated sheets, and hydrophobic loops (transmembrane domain). The antibody of Group III is composed of amino acids linked in peptide bonds and arranged spatially in a very specific tertiary structure that allows that antibody to specifically bind to particular regions, i.e., epitopes,

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of the encoded polypeptide. Further, antibodies are glycosylated and their tertiary structure is unique, where four subunits (2 light chains and 2 heavy chains) associated via disulfide bonds into a Y-shaped symmetric dimer. The polypeptide and nucleic acid vaccine compositions of Groups VII and VIII are specifically made to illicit an immune response. Furthermore, the products of Groups I, II, III, VII, and VIII can be used in materially different processes, for example, the DNA of Group I can be used in hybridization assays, the antibody of Group III can be used in immunoassay, the polypeptide of Group II can be used to make fusion protein with an enzymatic function, the vaccine of Group VII or VIII can be used to immunize an animal against disease. Consequently, the reagents, reaction conditions, and reaction parameters required to make or use each invention are different. Therefore, the inventions of Groups I, II, III, VII, and VIII are patentably distinct from each other. (See MPEP § 806.04, MPEP § 808.01, unrelated inventions)

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- B) Inventions I and (V, VI) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects.

 (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not required one for the other in that the DNA Group I is not required for the methods of Groups (V, VI).
- C) Inventions I and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP §

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806.05(h)). In the instant case the DNA of Group I could be used in an entirely different method, such as in the recombinant production of the polypeptide rather than in the method of Group IV.

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- D) Inventions III and (V, VI) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the antibody of Group III could be used in entirely different methods, such as the detection or treatment methods of Groups V or VI.
- E) Inventions II and (IV, V, and VI) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not required one for the other in that the polypeptide of Group II is not required for the methods of Groups (IV, V, and VI).
- F) Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions are not required one for the other in that the antibody of Group III is not required for the method of Group IV.

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G) Inventions IV-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to methods, which have different method steps, starting materials and goals.

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H) Inventions (IV-VI) and (VII, VIII) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions are not required one for the other in that the vaccine of Groups (VII, VIII) is not required for the method of Groups (IV-VI).

Because these inventions are distinct for the reasons given above and have acquired a different status in the art as demonstrated by their different classification and recognized divergent subject matter and because inventions I-VIII require different searches that are not coextensive, examination of these distinct inventions would pose a serious burden on the examiner and therefore restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R Horlick whose telephone number is 703-308-3905. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 703-308-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Kenneth R Horlick
Primary Examiner
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09/10/03